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EXAMINER

QUASH, ANTHONY G

ART UNIT

PAPER NUMBER

2881

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/840,364

Applicant(s)

Art Unit

Examiner

Anthony Quash

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-23 and 35-38 is/are allowed.
- 6) ☒ Claim(s) 1-20, 24-34 and 39-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

***Specification***

On page 8 lines 21-22, numeral (45) is called a "pellicle support", and on page 6 line 29 it is referred to as a "magnet". It is required to design the numeral as the same term throughout the specification. Appropriate correction is required.

On, page 8 line 22, numeral (50) is referred to as a "pellicle diaphragm", and on page 8 line 7 it is referred to as a "pellicle". It is required to design the numeral as the same term throughout the specification. Appropriate correction is required.

On page 12 line 15, numeral (130) is referred to as a "pellicle diaphragm" and on page 12 line 1 it is referred to as a "pellicle". It is required to design the numeral as the same term throughout the specification. Appropriate correction is required.

On page 1 lines 5-15, the serial numbers to the applications that applicants' referred to, are missing in the specification. These numbers should be filled in. It is believed by the examiner that the missing serial numbers are: 09/840,407 to patent number 6,566,018, and 09/840,373 to patent number 6,569,582. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-10,12 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki [250]. As per claim 7, Suzuki [250] discloses a base (26) to align with a photomask (1) a retractable pellicle (2,3), (pellicle frame (4,5)), to move pivotlessly relative to the base between a first position overlying the photomask (1) and a second position away from the photomask (1), and a transport element (52) to move the pellicle (100). See Suzuki [250] abstract, figs. 1a-2a, 8-10, col. 1 lines 5-50, col. 3 lines 10-65, col. 4 lines 1-50, and col. 5 lines 1-15, 45-60.

As per claim 8, Suzuki [250] discloses the transport element (52) comprising at least one arm member (52a) coupled to the pellicle (2,3), (pellicle frame (4,5)). See Suzuki [250] figs. figs. 1a-2a, 8-10, and col. 3 lines 30-50.

As per claim 9, Suzuki [250] discloses the pellicle not contacting the base (26) in the second position. See Suzuki [250] figs. 1a-2a, 8-10.

As per claim 10, Suzuki [250] discloses the pellicle (2,3), (pellicle frame (4,5)), moving along an axis with respect to the base (26). See Suzuki [250] figs. 1a-2a, 8-10.

As per claim 12, Suzuki [250] discloses the pellicle (2,3), (pellicle frame (4,5)), comprising a securing mechanism (20) to maintain the pellicle (2,3) overlying the base (26) when the pellicle (2,3), (pellicle frame (4,5)), is in the first position. See Suzuki [250] figs. 1a-2a, 8-10.

Claims 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki [250]. As per claim 18, Suzuki [250] discloses a pellicle device comprising a base (47) to align with a photomask (1), a pellicle diaphragm (2,3) coupled to the base (47) having

a closed position to cover the photomask (1) and having an open position to uncover the photomask (1). See Suzuki [250] abstract, figs. 1a-2a, 8-10, col. 1 lines 1-45, and columns 2-3.

As per claim 19, Suzuki [250] discloses the pellicle device further comprises a transport element (51,52,52a) coupled to the pellicle diaphragm (2) to open and close the pellicle diaphragm (2). See Suzuki [250] abstract, figs. 1a-2a, 8-10, col. 1 lines 1-45, and columns 2-3.

As per claim 20, Suzuki [250] discloses the base (47) and the pellicle diaphragm (2,3) forming a protective enclosure around the photomask (1). See Suzuki [250] abstract, figs. 1a-2a, 8-10, col. 1 lines 1-45, and columns 2-3.

Claims 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki [250]. As per claim 24, Suzuki [250] discloses a method comprising covering a photomask (1) with a retractable pellicle (2,3), and pivotlessly retracting the pellicle (2,3) away from the photomask (1) to uncover the photomask (1). See Suzuki [250] abstract, figs. 1a-2a, 8-10, col. 1 lines 5-50, col. 3 lines 10-65, col. 4 lines 1-50, and col. 5 lines 1-15, 45-60.

As per claim 25, Suzuki [250] discloses the pellicle (2,3) being retracted along one axis. See Suzuki [250] abstract, figs. 1a-2a, 8-10, col. 1 lines 5-50, col. 3 lines 10-65, col. 4 lines 1-50, and col. 5 lines 1-15, 45-60.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura [051]. As per claim 1, Imamura [051] teaches a base to align with a photomask (200) a pellicle ((112), frame that the pellicle is in (210)) to slide relative to the base between a first position overlying the photomask (200) and a second position, and a transport element (231-236) to move the pellicle ((112), frame that the pellicle is in (210)). See Imamura [051] abstract, figs. 1,3,5,9, col. 1 lines 10-30, col. 3 lines 1-15, 40-69, col. 4 lines 55-60, col. 5 lines 3-58, and col. 6 lines 40-50,60-65. Although Imamura [051] does not specifically state the second position not overlying the photomask (200), it would have been to one of ordinary skill in the art at the time the invention was made to have the second position not overly the photomask in order to irradiate the photomask during times when it desired to irradiate the photomask without the pellicle.

Claim 2 is rejected as being dependent upon a rejected base claim.

As per claim 3, Imamura [051] teaches the pellicle (112), frame that the pellicle is in (210) comprising a securing mechanism (317,327) to maintain the pellicle overlying the base when the pellicle (112), frame that the pellicle is in (210) is in the first position.

See Imamura [051] figs. 1,3,5,9, col. 3 lines 40-69, col. 4 lines 50-60, col. 5 lines 3-50, and col. 6 lines 36-65.

As per claim 4, Imamura [051] teaches the securing mechanism using at least one magnetic field (317, 327). See Imamura [051] figs. 1,3,5,9, col. 3 lines 40-69, col. 4 lines 50-60, col. 5 lines 3-50, and col. 6 lines 36-65.

As per claim 5, Imamura [051] teaches all aspects of the claim, except for specifically stating that the securing mechanism comprising an electromagnet to produce the at least one magnetic field. Imamura [051] does however, teach first and second magnetic means includes a magnet and the other of the first and second magnetic means being made from a material, which is capable of being attracted to the magnet. See Imamura [051] col. 6 lines 40-65. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the securing mechanism comprise an electromagnet to produce the at least one magnetic field, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

As per claim 6, Imamura [051] teaches the securing mechanism further comprising an outrigger element within the at least one magnetic field. See Imamura [051] fig. 9, and col. 5 lines 35-47.

Claims 11,13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki [250]. As per claim 13, Suzuki [250] teaches all aspects of the claim except for specifically stating the pellicle being opaque to photolithographic radiation. It would

have been obvious to one having ordinary skill in the art at the time the invention was made to have the pellicle be opaque to photolithographic radiation, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

As per claim 14, Suzuki [250] teaches all aspects of the claim except for specifically stating a portion of the pellicle being transparent to inspection radiation. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a portion of the pellicle being transparent to inspection radiation, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

Claim 11, is rejected for being based upon a rejected claim.

Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walwyn [038]. As per claim 15, Walwyn [038] teaches a pellicle device comprising a base (10) to align with a photomask (66,70). See Walwyn [038] fig. 2. However, Walwyn [038] does not specifically state a pellicle to move about a vertical axis relative to the base between a first position overlying the photomask and a second position not overlying the photomask, and a transport element to move the pellicle. Walwyn [038] does teach means for moving the photomask (66,70) around a horizontal axis relative to the pellicle (76), and a transport element to move the photomask (66,70) relative to the pellicle (76). See Walwyn [098] abstract, figs. 1-6, col. 1 lines 5-69, col. 2 lines 44-65, col. 3 lines 5-65, and col. 4 lines 1-65. It would have been obvious to one having



ordinary skill in the art at the time the invention was made to have a pellicle to move about a vertical axis relative to the base between a first position overlying the photomask and a second position not overlying the photomask, and a transport element to move the pellicle since the examiner takes official notice of the equivalence of means for moving the photomask (66,70) around a horizontal axis relative to the pellicle (76), and a transport element to move the photomask (66,70) relative to the pellicle (76) and a pellicle to move about a vertical axis relative to the base between a first position overlying the photomask and a second position not overlying the photomask, and a transport element to move the pellicle for there use in the lithography art for covering and replace pellicles and photomask without damaging one another, and the selection of any of these known equivalents for covering and replace pellicles and photomask without damaging them would be within the level of ordinary skill in the art.

As per claim 16, Walwyn [098] teaches the device comprising a securing mechanism to maintain the pellicle overlying the base (10) when the photomask (66,70) is in a first position. See Walwyn [098] figs. 1-6, col. 3 lines 10-20, and col. 4 lines 1-30. Although Walwyn [098] does not specifically state the pellicle being in a first position relative to a second position, the examiner takes official notice of the equivalence between the reference and applicants' claim since it is the photomask which is doing the moving in the reference and also because the pellicle still stands between a radiation source and the photomask. See Walwyn [098] col. 4 lines 55-65.

Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walwyn [098] in view of Imamura [051]. As per claim 17, Walwyn [098] teaches all

aspects of the claim except for specifically stating that the securing mechanism use at least one magnetic field. Imamura [051] does teach a securing mechanism using at least one magnetic field. See Imamura [051] abstract, fig. 5, col. 5 lines 19-30, and col. 6 lines 39-50. It would have been obvious to one of ordinary skill in the art to have the securing mechanism use at least one magnetic field since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

Claims 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Catey [863]. As per claim 24, Catey [863] teaches the all aspects of the claimed invention except that Catey [863] teaches covering a reticle (photomask) with a removable cover comprising a frame and membrane and transporting the removable cover comprised of a membrane away from the reticle (photomask) to uncover the reticle (photomask) instead of covering a photomask with a retractable pellicle, and pivotlessly retracting the pellicle away from the photomask to uncover the photomask. Catey [863] shows that covering a reticle (photomask) with a removable cover comprising a frame and membrane and transporting the removable cover comprised of a membrane away from the reticle (photomask) to uncover the reticle (photomask) is an equivalent structure/method known in the art. See Catey [863] abstract, figs. 1-10B, col. 2 lines 35-68, col. 3 lines 39-60, col. 5 lines 28-48, col. 7 lines 19-43, col. 8 lines 30-45, and col. 9 lines 55-65. Therefore, because these two methods for covering and uncovering the photomask were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute

covering a reticle (photomask) with a removable cover comprising a frame and membrane and transporting the removable cover comprised of a membrane away from the reticle (photomask) to uncover the reticle (photomask) for covering a photomask with a retractable pellicle, and pivotlessly retracting the pellicle away from the photomask to uncover the photomask in order to prevent particle from adhering to the photomask during EUV exposure as taught in Catey [863].

As per claim 25, Catey [863] teaches the removable cover comprised of a membrane (pellicle) being transported along one axis. See Catey [863] figs. 6-10B, col. 3 lines 39-60 and col. 8 lines 30-45.

As per claim 26, Catey [863] teaches the removable cover comprised of a membrane (pellicle) being transported away to irradiate the reticle (photomask) with photolithographic radiation. See Catey [863] figs. 6-10B, col. 3 lines 39-60, and col. 8 lines 30-45.

As per claim 27, Catey [863] teaches replacing the removable cover comprised of a membrane (pellicle) when not irradiating the photomask with photolithographic radiation. See Catey [863] figs. 1-10B, col. 3 lines 39-60, and col. 9 lines 50-65.

As per claim 28, Catey [863] teaches the removable cover comprised of a membrane (pellicle) being coupled to a transport element (520), the method further comprising transporting and replacing the removable cover comprised of a membrane (pellicle) using the transport element (520). See Catey [863] figs. 6-10b, col. 2 lines 35-67, col. 3 lines 39-60, and col. 8 lines 30-45.

As per claim 29, Catey [863] teaches all aspects of the claim except for specifically stating that the wavelength of the photolithographic radiation being within the range of 2 to 200 nanometers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the wavelength of the photolithographic radiation being within the range of 2 to 200 nanometers, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art.

As per claim 30, Catey [863] teaches all aspects of the claim except for specifically stating that the photolithographic radiation come from the group consisting of ultraviolet, deep ultraviolet, extreme ultraviolet, x-ray, electron beam, and ion beam radiation. Catey [863] does however imply that the photolithographic radiation come from a group consisting of ultraviolet, deep ultraviolet, extreme ultraviolet, x-ray, electron beam, and ion beam radiation when states that the reticles (photomask) are to be used within the high vacuum system of an EUV process. See Catey [863] col. 7 lines 21-42 and co. 10 lines 50-55. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the photolithographic radiation come from a group consisting of ultraviolet, deep ultraviolet, extreme ultraviolet, x-ray, electron beam, and ion beam radiation in order to provide correct exposure to the substrate being imprinted.

Claims 31-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Walwyn [038]. As per claim 31, Walwyn [038] teaches all aspects of the claim except for specifically stating covering a photomask with a pellicle that is pivotable about a

vertical axis and pivoting the pellicle away from the photomask to uncover the photomask. Walwyn [038] does however, teach the photomask (66,70) covering a pellicle (76) wherein the photomask is pivotable about a horizontal axis and pivoting the photomask (66,70) away from the pellicle (76) to uncover the pellicle (76). See Walwyn [098] abstract, figs. 1-6, col. 1 lines 5-69, col. 2 lines 44-65, col. 3 lines 5-65, and col. 4 lines 1-65. It would have been obvious to one having ordinary skill in the art at the time the invention was made to cover a photomask with a pellicle that is pivotable about a vertical axis and pivoting the pellicle away from the photomask to uncover the photomask, since it has been held that rearranging parts of an invention involves only routine skill in the art. With respect to the applicants' claim concerning the axis being vertical, the examiner takes official notice of the equivalence equivalence between a vertical axis and a horizontal axis for the use in providing a means for covering the photomask (66,70). In addition, the examiner would like to point out to the applicants that the pellicle being located on the bottom actually acts as a shield for prevent does from a table or ground flying up and contaminating the photomask from the underneath.

Claim 32 is rejected as being based on a rejected base claim.

As per claim 33, Walwyn [038] teaches all aspects of the claim except for specifically stating replacing the pellicle when not irradiating the photomask with photolithographic radiation. Walwyn [038] does teach the device being designed easy removal and insertion of pellicles (94) and to accept pellicles of various size and shape. See Walwyn [038] col. 4 lines 28-40. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to replace the

pellicle when not irradiating the photomask with photolithographic radiation in order to change the shape and size of the pellicle being used and to replace a dirty pellicle with a clean pellicle.

As per claim 34, Walwyn [038] teaches all aspect of the claim except for specifically stating the pellicle being coupled to a transport element and pivoting and replacing the pellicle using the transport element. Walwyn [038] does teach the pellicle (76) being located in a part of the device the is coupled to the transport element and that by pivoting the transport element, one is able to replace the pellicle (76). See Walwyn [038] abstract, figs. 1-2, col. 1 lines 50-60, and col. 2 lines 43-65. Therefore, it would have been obvious to one of ordinary skill in the art to have the pellicle be coupled to a transport element and pivoting and replacing the pellicle using the transport element in order to allow easy removal of the pellicle when it is desired to replace the pellicle as taught in Walwyn [038].

Claims 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Catey [863]. As per claim 39, Catey [863] teaches the all aspects of the claimed invention except that Catey [863] teaches teaches a removable cover comprising a frame and a membrane for covering a reticle (photomask), and opening the cover (with the membrane) to uncover the reticle (photomask) instead of covering a photomask with a pellicle comprising a diaphragm and opening the diaphragm to uncover the photomask. See Catey [863] abstract, figs. 1-10B, col. 2 lines 35-67, col. 3 lines 38-60, col. 5 lines 30-48, col. 7 lines 19-42, col. 8 lines 30-45, and col. 9 lines 58-65. Catey [863] shows that a removable cover comprising a frame and a membrane for covering a

reticle (photomask) is an equivalent structure known in the art. Therefore, because these two methods for shielding photomask were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a removable cover comprising a frame and a membrane for covering a reticle (photomask), and opening the cover (with the membrane) to uncover the reticle (photomask) for covering a photomask with a pellicle comprising a diaphragm and opening the diaphragm to uncover the photomask in order to provide a means for preventing contaminants from settling on a photomask during EUV exposure as taught by Catey [863].

As per claim 40, Catey [863] teaches photomask being uncovered to irradiate the photomask with photolithographic radiation. See Catey [863] abstract, figs. 1-10B, col. 2 lines 35-67, col. 3 lines 38-60, col. 5 lines 30-48, col. 7 lines 19-42, col. 8 lines 30-45, and col. 9 lines 58-65.

As per claim 41, Catey [863] teaches closing the membrane (diaphragm) when not irradiating the reticle (photomask) with photolithographic radiation. See Catey [863] abstract, figs. 1-10B, col. 2 lines 35-67, col. 3 lines 38-60, col. 5 lines 30-48, col. 7 lines 19-42, col. 8 lines 30-45, and col. 9 lines 58-65.

As per claim 42, Catey [863] teaches the membrane (diaphragm) being coupled to a transport element, the method further comprising opening and closing the membrane (diaphragm) with the transport element (520). See Catey [863] abstract, figs. 1-10B, col. 2 lines 35-67, col. 3 lines 38-60, col. 5 lines 30-48, col. 7 lines 19-42, col. 8 lines 30-45, and col. 9 lines 58-65.

***Allowable Subject Matter***

Claims 21-23, and 35-38 are allowable over the prior art of record.

The following is a statement of reasons for the indication of allowable subject matter: With respect to 21-23, the prior art of record does teach nor disclose "a pellicle comprising two or more shutters to move relative to the base between a first position overlying the photomask and a second position not overlying the photomask," in combination with the rest of claim 21.

With respect to claims 35-38, the prior art of record does not teach nor disclose a method comprising, "covering a photomask with a pellicle comprising two or more shutters and opening the shutters to uncover the photomask."

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Nos. 4,641,930 to Podvin et al, 6,317,197 to Li et al, 4,898,058 to Seifert, 4,637,713 to Shulenberger et al, 4,831,640 to Buckley and Japanese Patent Nos. 2000-305249 to Nakamura Hajime, and 61-216324 to Yamashita Hiromi. Podvin [930] is considered pertinent because of teaching of a means for transporting a photomask with pellicles attached to it. Li [197] is considered pertinent because of its teaching of a mask pellicle removing tool. Seifert [058] is considered pertinent because of its teaching of an apparatus for removing pellicles. Shulenberger



[640] is considered pertinent because of its teaching of a pellicle mounting apparatus. Buckley [640] is considered pertinent because of its teaching of a device which moves the pellicle with respect to the photomask. Hajime [JP 2000-305249] is considered pertinent because of its teaching of a foreign matter inspecting device for pellicles and reticles. Hiromi [61-216324] is considered pertinent because of its teaching of contracted projection type exposure device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Quash whose telephone number is (703)-308-6555. The examiner can normally be reached on M-F from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee, can be reached on (703)-308-4116. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

AQ

A. Quash 6/17/03

JOHN R. LEE  
SUPERVISOR OF PATENT EXAMINERS  
TECHNICAL STAFF